

YAMAHA

OWNER'S MANUAL

RD350B

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**RD350B OWNER'S MANUAL
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P/N LIT-11623-60-00

NOTICE

Yamaha Motor Company and its U.S. subsidiary, Yamaha International Corporation, are confident you will enjoy new Yamaha to the utmost.

We have made every effort to provide you with a safe, well engineered and constructed product. This Owner's Manual will acquaint you with several features and maintenance procedures concerning your Yamaha. However, if you are unfamiliar with the product, features or procedures outlined in this booklet we strongly urge you to consult your Authorized Yamaha Dealer for additional information.

Please review your owner's warranty guide book thoroughly regarding your warranty obligations.

Export Service Division

Yamaha Motor Company, Ltd.

Iwata, Japan

FOREWORD

It is our greatest pleasure that you are now a member of the Yamaha RD350B riders.

The Yamaha RD350B, now ready for your use and service, is a motor-cycle which has been manufactured by us under strictest quality control in our Factory.

Naturally, like any other model, proper handling, and daily inspection, adjustment and care are a pre-requisite for a successful continuity of the top performance of this model.

This Manual discusses these points to assist you in your best operation and handling of the Yamaha RD350B.

Your perusal of the various items in this Manual is sincerely requested.

**Export Service Division
Yamaha Motor Company, Ltd.
Iwata, Japan**

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I. GENERAL VIEW



1. Rear shock absorber
2. Headlight
3. Brake pedal
4. Rear brake

- 5. Change pedal
- 6. Front fork
- 7. Fuel petcock
- 8. Oil tank
- 9. Taillight
- 10. Exhaust pipe



II. FEATURES

1. "TORQUE INDUCTION" System

Another new type engine has made its debut! The reed valve has been adopted as a new intake system on Yamaha's RD350B. This, together with the 7-port cylinders, ensures excellence in steady engine performance from low to high speed running.

2. Highly-dependable Yamaha autolube

Yamaha Autolube provides superior engine lubrication that extends the service life of the engine.

3. Easy starting

The engine can be started by simply disengaging the clutch and kicking the kick pedal without shifting gears back to neutral. This is a valuable convenience to the rider.

4. Adoption of disc brake

The large size disc brake has been adopted to ensure efficient and steady braking both at low and high speeds and in rainy weather.

5. Adjustable rear cushion

The rear shock absorbers are adjustable to three positions. The rider can adjust spring tension to compensate for varying weights, speeds, and road conditions.

6. Front fork design

The Yamaha RD350B employs a front fork design well-known for its strength and superior handling characteristics. Its use assures the rider of the ultimate suspension for even the roughest road.

7. Speedometer and tachometer

A speedometer and tachometer are standard equipment. The individual units are separately mounted for maximum visibility. An additional feature of the speedometer is an odometer which can be reset to zero for touring purposes.

8. Carburetor with built-in starter jet

Yamaha's carburetor is already well-known for providing easy starting. Equipped with this unique starter jet, the Yamaha RD350B is quick starting under all conditions.



III. MACHINE IDENTIFICATION

1. Frame serial number

The frame serial number is located on the right-hand side of the headstock assembly. The first three digits identify the model. This is followed by a dash.

The remaining digits identify the production number of the unit.
RD350B production begins - 300101.



1. Frame serial number

2. Engine serial number

The engine serial number is located on a raised boss on the upper rear, right hand side of the engine. Engine identification follows the same code as frame identification.

Normally, both serial numbers are identical; however, on occasion they may be two or three numbers off.

Note:

Always check your registration papers against the actual machine serial numbers. If any discrepancy is found, have it corrected immediately.



1. Engine serial number

IV. CONTROL FUNCTION

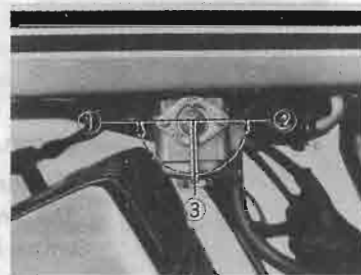
1. Main switch

The following chart shows the key position at which the lamps, horn and ignition circuit are switched on or off: (The circle (○) denotes "Switch on")

Part Name	Key position			Instructions
	OFF	I	II	
Ignition circuit		○		Kick starting.
Head lamp		○		Turn on right handlebar switch.
Tail lamp		○	○	Turn on left handlebar switch. Use II when parking at night.
Neutral lamp		○		The change pedal is in neutral.
Stop lamp		○		The brake is applied.
Meter lamps		○	○	Turn on right handlebar switch.
Horn		○		Turn on left handlebar switch.
Flasher lamps		○		Turn on left handlebar switch.

2. Fuel petcock

To fill the carburetor float bowls, set the fuel petcock lever to the OPEN position. If you should run low of fuel on the road, turn the lever to RESERVE position. With just over a quart of fuel, remain-



1. Reserve
2. Stop
3. ON

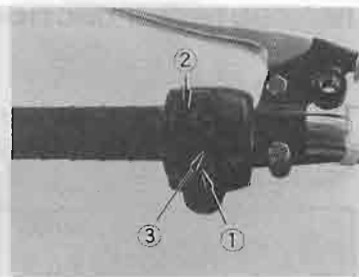
ing you can drive nearly 15 miles (24 kms.), enough to get you to the nearest service station for refueling. When parking or storing your machine, be sure that the lever is in the STOP position.

3. Handlebar switch

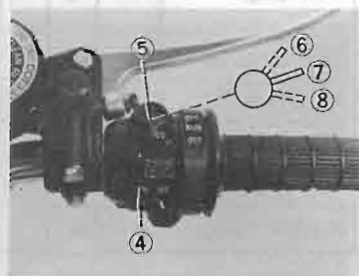
1. Horn button: To sound the horn, press the horn button.
2. Dimmer switch: To lower the headlight beam, pull the switch toward you. To raise the beam, push the switch forward.
3. Flasher switch: To signal a right turn, push the switch to the right. For left turns, push switch left.
4. Lighting switch: Turn the lighting switch to "ON" to light the headlight, taillight, and meterlights.
5. Kill switch: Make sure that the "kill" switch is on "RUN". The "kill" switch has been equipped to ensure safety in an emergency such as when the motorcycle is upset or when trouble takes place in the throttle system.

Caution:

The engine will not start when the "kill" switch is turned to "OFF".



1. Horn button
2. Dimmer switch
3. Flasher switch



4. Lighting switch
5. Kill switch
6. Off
7. Run
8. Off

4. Indicator lamps

1. Flasher pilot lamp (AMBER)

When flasher switch is on, the pilot lamp flashes.

2. Neutral lamp (GREEN)

Mounted within the tachometer shell, the neutral indicator lights whenever the transmission is in neutral.

3. High beam indicator – “BEAM” (BLUE)

Mounted on middle of the meter bracket, the high beam glows whenever the headlight high beam is in use.

4. Stop lamp indicator – “STOP LAMP” (RED)

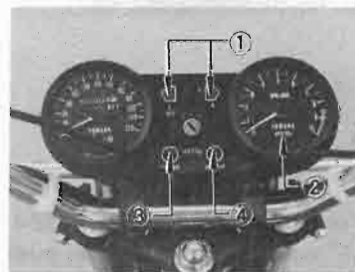
A “STOP LAMP” indicator is mounted in the meter bracket to advise the rider of normal operation, or failure, of the stop lamp.

When the main switch is in Position 1 and either front or rear brake is applied, the stop lamp indicator will light steadily.

If the stop lamp does not work normally, the “STOP LAMP” indicator will flash on and off as soon as the main switch is turned on, without operating either brake.

Warning:

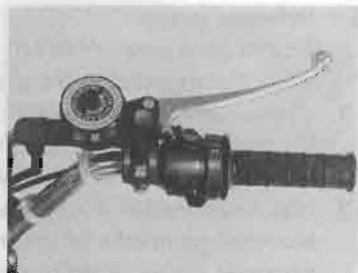
Do not ride machine, at any time, if “STOP LAMP” indicator is flashing. Replace taillight bulb or repair wiring before proceeding.



1. Flasher pilot lamp
2. Neutral lamp
3. Stop lamp outage
4. High beam indicator

5. Front brake (right handlebar lever)

The right handle lever controls the operation of the front brake. The front brake is of the disc type and is adjustable only at the brake lever.



6. Steering lock

Turn the handlebar to the right, insert the ignition key and turn it 45° counter-clockwise then push the key and turn it 45° clockwise. Remove the key after checking to see that the front forks are securely locked. Be sure to lock your forks whenever you park. (see also, #2, Fuel petcock)



CAUTION:

Be sure to unlock the forks before trying to ride your machine.

7. Rear shock absorber adjustment

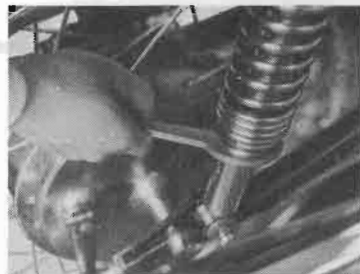
Place machine on mainstand, set the ring nut wrench as shown and turn it to change the spring rate.

The rear suspension should be adjusted to fit the load, speed and road conditions.

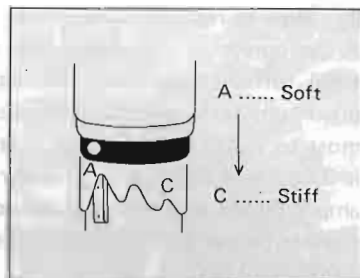
Standard A

↓ (3 positions)

Stiff C



*Adjust both shock absorbers to the same position.



8. Tripmeter

A tripmeter is built into the speedometer shell. Twist the knob to reset the tripmeter



1. Tripmeter knob

9. How to read the tachometer

A tachometer is provided so that the rider can easily maintain engine RPM sufficient to keep the engine within the power curve. For maximum performance accelerate in each gear to 6,500 r.p.m. or at most to 7,000 r.p.m. before shifting. The best range for city driving is 3,500 to 4,000 r.p.m. in lower gears. In this range the engine has ample power and yet is quite docile. Never lug your engine! (i.e. operate below 3,500 r.p.m.) It is recommended not to use red-zone 8,000 ~ 10,000 r.p.m.



1. Speedometer

2. Odometer

3. Tachometer

4. Red zone

5. Tripmeter

Caution:

See "Break-in" section for additional information.

V. BASIC INSTRUCTION

1. Gasoline

Use fuel with an octane rating of 90+. Some regular fuels and most mid-range have 90+ octane ratings. Ethyl grade fuels usually have octane ratings in excess of 100. In addition, they have considerable tetra-ethyl lead added which can cause spark plug problems. Whenever possible, use fresh, low lead gasoline.



2. Oil

We recommend that your first choice be YAMALUBE 2-stroke, which can be purchased from any Yamaha dealer. If for any reason you use another type of oil, choose from the following list, which is in descending order of preference.

- | |
|---|
| a. Another brand of 30 wt. two-stroke oil labeled "BIA certified for service TC-W". |
| b. A 30 wt. two-stroke oil designed for air cooled engines. |
| c. A 30 wt., quality, detergent type automotive oil. |



Caution:

Use item c. only in emergencies when two-stroke oils are not available.

Note:

Under extremely cold conditions (+32°F and below), some oils become exceedingly thick and do not flow as readily.

Consult your dealer regarding the oil you are using and the conditions under which you are riding.

3. Checking the front brake fluid

If the brake fluid level becomes low, brake failures may occur.

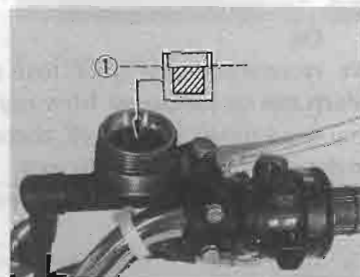
Check the master cylinder fluid level. If it is below the specified level, add brake fluid.

Brake fluid type: DOT #3 or #4

Boiling point: 464°F or better

Important note:

1. Do not allow any brake fluid to contact painted surfaces, plastic parts or rubber parts or they will be damaged.
2. If the brake fluid level decreases rapidly, have your Yamaha dealer check the brake system immediately.
3. Avoid using any brake fluids other than these meeting DOT #3 or #4 specifications.
4. Avoid mixing the brake fluid with other makes. Chemical reactions may occur, causing brake troubles.
5. When adding brake fluid, take care not to allow any water to enter the system.



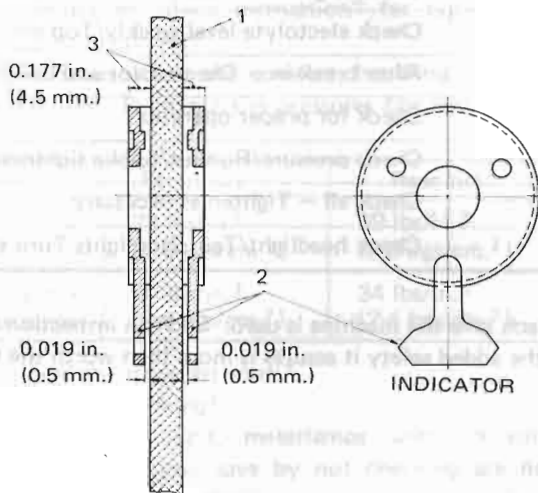
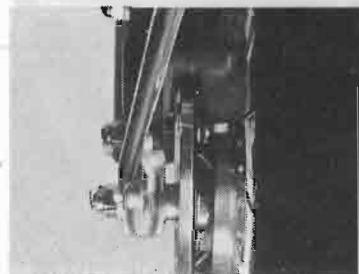
1. Fluid level

4. Checking the disc brake pads

For easy check of wear on the disc brake pads, a wear indicator is attached to each brake pad. This indicator permits a visual check without disassembling the pads.

To check, apply the brake, and measure the gap between the disc and the indicator.

If the gap measures less than 0.019 in. (0.5 mm.) have your Yamaha dealer replace the pads.



1. Brake disc
2. Wear indicator
3. Wear limits

PRE-OPERATION CHECK CHART

Page	Item	Remarks
38	BRAKES	Check operation/Adjustment/Hydraulic reservoir
33	CLUTCH	Check operation/Lever adjustment
—	AUTOLUBE	Check oil level/Top-off as required
—	ENGINE OIL	Check trans/Sump level/Top-off as required
41	DRIVE CHAIN	Check alignment/Adjustment/Lubrication
43	BATTERY	Check electrolyte level weekly/Top-off monthly
51	SPARK PLUG	After break-in — Check color and condition weekly
—	THROTTLE	Check for proper operation
—	WHEELS & TIRES	Check pressure/Runout/Spoke tightness/Axle nuts
—	FITTINGS/FASTENERS	Check all — Tighten as necessary
—	LIGHTS/SIGNALS	Check headlight/Tail- Stoplights Turn sigs., etc.

Pre-operation checks should be made each time the machine is used. Such an inspection can be thoroughly accomplished in a very short time; and the added safety it assures is more than worth the time involved.

VI. OPERATION

1. Before starting

Before you start for a ride you should check several points for safety. In particular:

- Do you have enough fuel?
- Do you have enough oil?

If the oil level shows in the glass port, add oil. Make sure that the oil is sufficient for your driving plan by using the oil dip stick. (Refer to "Basic instruction" for type of oil)

- Are your tire pressures correct?

Incorrect tire pressures affect the comfort, handling, acceleration and life of tires. Incorrect tire pressures can also lead to accidents?

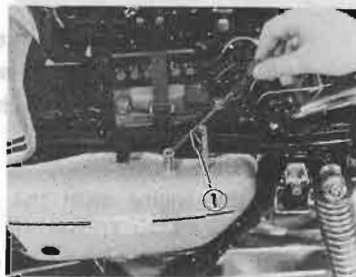
	Front tire	Rear tire
Normal riding	23 lbs/in. ² (1.6 kgs/cm. ²)	29 lbs/in. ² (2.0 kgs/cm. ²)
Continuous high speed riding or with passenger	29 lbs/in. ² (2.0 kgs/cm. ²)	34 lbs/in. ² (2.4 kgs/cm. ²)

- Do both brakes and the stoplight work?
- Are the lights and horn working?

Check the headlight, taillight, meterlamps, and indicating lamps. The few minutes you save by not checking are not worth being stranded without lights!



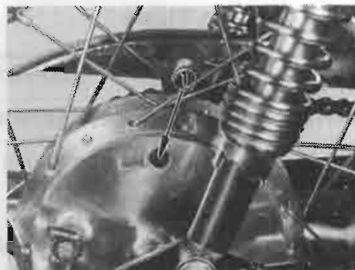
1. Glass port



1. Dip stick

- f. Have you checked the thickness of brake linings through the inspection hole at the shoe plate for rear brake?

If it is less than 0.08 in. (2 mm.), have your dealer replace the brake shoes.



1. Inspection hole

2. Starting

- a. Turn the fuel petcock lever to the "OPEN" position.
- b. Insert the ignition Key and turn it to the #1 position.

The use of a primary kick starting system enables you to start the engine either in gear or in neutral (if in gear, pull in the clutch lever).

Starting in cold weather

- c. Most engine are difficult to start in cold or freezing weather. YAMAHA Motorcycles, however, uses a carburetor with a built-in starter jet that gives a richer mixutre for easier cold weather starting.
- 1) Depress the starter lever.
- 2) Start the engine with the kick starter, keeping the throttle closed.

Starting when your engine is warm

- d. When your engine is warm, after riding or in warm weather, don't use the starter lever. Open the throttle slightly (1/4 turns or less) and kick the starter.



Warming up

- e. To get maximum engine life, always "warm up" the engine for a few minutes before starting off. Never accelerate hard with a cold engine! To see whether or not the engine is warm, see if it responds to throttle normally. Don't forget to raise the starter lever after the engine is warm.

3. Shifting and acceleration

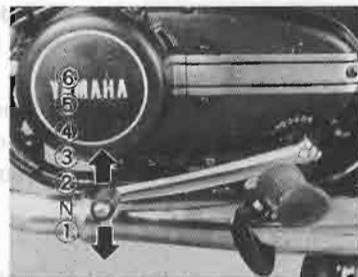
RD350B has a 6-speed transmission. The transmission allows you to control the amount of power you have available at a given speed or starting accelerating, climbing hills, etc.

The use of the change pedal is illustrated at the right.

To shift into NEUTRAL, depress the change pedal to the end of its travel (you will feel a stop when you are in low gear), then raise it slightly.

If you are in neutral, the green light in the tachometer will be on.

- a. Pull the clutch lever to disengage the clutch.
- b. Shift into FIRST gear.
- c. Open the throttle gradually, and, at the same time, release the clutch lever slowly.
- d. At 10 to 15 mph., close the throttle, and at the same time pull in the clutch lever quickly.
- e. Shift into SECOND, be careful not to shift into neutral.
- f. Open the throttle part way and gradually release the clutch lever.



- 1. FIRST
- 2. SECOND
- 3. THIRD
- 4. FOURTH
- 5. FIFTH
- 6. SIXTH

- g. To accelerate or decelerate, use the same procedure to shift into THIRD, FOURTH, FIFTH, and SIXTH gears.
- h. Except for competition or high speed driving, shift so that the engine speed remains between 4,000 ~ 5,000 r.p.m. This is the optimum operating range for the engine.

- **Going Uphill**

When starting to climb a gentle grade, open the throttle little by little to avoid losing engine speed and power.

When climbing a steep grade, shift down (for example) from FIFTH to FOURTH or from FOURTH to THIRD as required.

- **Going Downhill**

On a long down grade or sharp descent, don't rely on the brakes alone, but use the engine compression as a brake: shift into FOURTH or THIRD as required by the grade and close the throttle.

Caution:

Never attempt to turn off the ignition switch on a long hill.

This may cause the spark plug to foul, in addition to being unsafe.

4. Stopping

There are several ways to stop.

Pulling in the clutch lever and twisting the throttle grip in the closed direction will permit you to gradually glide to a stop. Downshifting through the gears, using the drag of the engine to slow down is another. However, the best method, and the one most universally used, is to use both engine compression (downshifting through the gears as the machine slows) and the front and rear brakes.

After the rear brake starts to take hold, gradually apply the front brake.

As the machine continues to slow shift down through the gears using engine compression to aid the slowing effect. When shifting down, watch the tachometer to see that the engine does not over-rev.

Note:

During periods of inclement weather (snow, rain, sleet, or ice), or on poor road surfaces where traction is minimal, or in a sharp corner, IT IS NOT ADVISABLE TO FIRMLY APPLY THE FRONT BRAKE. While it is true that the front brake supplies the greater portion of braking power, it is also true that stability can be upset very easily if it is used incautiously under the above conditions.

5. Cruising

A frequently asked question is "What r.p.m. should I cruise at?"

The BREAK-IN section provides limitations when the motorcycle is

new, but once the engine has been broken in, then we suggest that you follow these guide lines. For sustained load and throttle conditions, such as those encountered on open highways, cruise at 3/4 throttle or at 3/4 of the r.p.m. "red line", whichever comes first. Always bear in mind though, the maximum allowable speed limit for the area through which you are riding. This is a recommendation, not a "hard and fast" rule. Any modification or personalization of the running gear could possibly change the operating range most comfortable and most efficient for the engine.

6. Break-in

THERE IS NEVER A MORE IMPORTANT PERIOD, IN THE LIFE OF YOUR RD350B THAN THE PERIOD BETWEEN ZERO AND FIVE HUNDRED MILES. For this reason we ask that you carefully read the following material.

Because the engine is brand new, you must not put an excessive load on it during the first several hours of running. You could look at it in this manner: During the first 500 miles the various parts in the engine wear and polish themselves to the correct operating clearances. During this period prolonged full throttle operation, or any condition which might result in excessive heat of cylinder, must be avoided. However, momentary full throttle operation, under load, (2 ~ 3 seconds maximum) does not harm the engine. Each full throttle acceleration sequence should be followed with a substantial

rest period for the engine by cruising at lower r.p.m.'s so the engine can rid itself of the temporary build up of heat.

Note:

Please read your Owner's Warranty Guide Book thoroughly. It explains your obligation during the break-in period.

a. 0 to 100 miles:

Avoid operation above 4,000 r.p.m.

Allow a cooling off period of 5 to 10 minutes after every hour of operation. Vary the speed of the motorcycle from time to time. Do not operate it at one, set throttle position.

b. 100 to 250 miles:

Avoid prolonged operation above 5,000 r.p.m.

Allow the motorcycle to rev freely through the gears but do not use full throttle at any time.

c. 250 to 500 miles:

Avoid prolonged full throttle operation.

Avoid cruising speeds in excess of 6,000 r.p.m.

d. 500 miles and beyond:

Avoid prolonged full throttle operation.

Avoid engine speeds in excess of 7,000 r.p.m. Vary speeds occasionally.

Note:

Please refer to your Owner's Warranty Guide Book and the Maintenance and Lubrication Charts for information regarding Initial Service Checks.

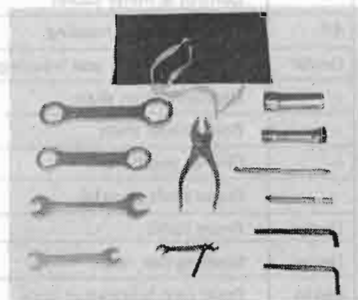
VII. SERVICING

The servicing information included in this manual is intended to provide you, the owner, with the necessary information to provide a means of doing your own preventive maintenance and minor repairs. The tools provided in the owner's tool kit are sufficient for this purpose, except that a torque wrench is also necessary to properly tighten nuts and bolts. (See torque chart, Page 31)

Should you desire additional service information on your RD350B a copy of Service Manual can be purchased from any Authorized Yamaha Dealer or direct from the Literature Department, Yamaha Parts Distributors, Inc., P.O. Box 6610, Buena Park, Calif. (90620) (Canadian Distributor: Yamaha Motor Canada, Ltd., 1350 Verdun Place, Richmond, B.C., Canada)

1. Lubrication and Maintenance Charts

These charts should be considered strictly as a guide to general lubrication and maintenance periods. You must take into consideration that weather, terrain, geographical locations, and a variety of individual uses all tend to demand that each owner alter this time schedule to match his environment. For example, if the motorcycle is continually operated in an area of high humidity, then all parts must be lubricated much more frequently than shown on the chart to avoid the ravages of water on metal parts. If you are in doubt as to how closely you can follow these time recommendations, check with the YAMAHA dealer in your area.



LUBRICATION INTERVALS

Page	Item	Remarks	Type	Initial (mile)				Thereafter every (mile)		
				250	500	1000	2000	1000	2000	4000
53	* Transmission oil change	Warm engine before draining	No. 1	CHK	○	○		CHK	○	
41	* Drive chain	Lubrication/Adjust as required	No. 2	See service notes						
41	* Drive chain	Remove/Clean/Lube/Adjust	No. 2			○		○		
	Control & meter cables	All-apply thoroughly	No. 3			○	○		○	
44	Throttle grip & housing	Light application	No. 4				○		○	
Dealer	Tacho & speedo gear housings	Light application	No. 4				○			○
—	Rear arm pivot shaft	Zerk-apply until shows	No. 5			○		○		
—	Brake pedal shaft	Light application	No. 4			○			○	
—	Change pedal shaft	Light application	No. 4			○			○	
—	Stand shaft pivot(s)	Light application	No. 4			○			○	
Dealer	Front forks	Drain completely	No. 8		CHK		○	CHK	○	
Dealer	Steering ball races	Inspect thoroughly/Pack	No. 6				○		CHK	○
Dealer	Point cam lubrication wick	Very light application	No. 7			○				○
Dealer	Wheel bearings	Do not over-pack	No. 6				○	CHK	○	

* indicates pre-operational check items.

Be sure to check the above points before long-distance touring.

RECOMMENDED LUBRICANTS

1. Use YAMALUBE 4-cycle oil, or SAE 10W-30 type "SE" motor oil.
2. Use SAE 10W-30 type "SE" motor oil. (If desired, specialty type lubricants of quality manufacture may be used.)
3. Use SAE 10W-30 type "SE" motor oil (If desired, or at ambient temperatures below 30°F., a graphite base "dry" lubricant of quality manufacture may be used.)
4. Light duty: Lithium soap base (white) grease. Heavy duty: Standard 90 wt. lube grease (Do not use 90 wt. lube grease on throttle/throttle housing.)
5. Use standard 90 wt. lube grease — smooth, not coarse.
6. Medium-weight wheel bearing grease of quality manufacture — preferably waterproof.
7. Light-weight machine oil.
8. Use YAMAHA fork oil.

Note:

Drive chain must be lubricated every 200 ~ 250 miles. If unit is subjected to extremely hard usage, chain must be inspected constantly and serviced as required.

PERIODIC MAINTENANCE INTERVALS

Page	Item	Remarks	Initial (mile)				Thereafter every (mile)	
			250	500	1000	2000	1000	2000
38	* Brake system (complete)	Check/Adjust as required — repair as required		○	○		○	
33	* Clutch	Check/Adjust as required		○	○		○	
43	* Battery	Top-off/Check specification gravity monthly, or	○		○		○	
51	* Spark plug(s)	Inspect/Clean or replace as required	○	○	○		○	
—	* Wheels & tires	Pressure/Spoke — tension/Runout	○	○	○		○	
—	* Fittings & fasteners	Tighten before each trip and/or	○	○	○		○	
41	* Drive chain	Tension/Alignment No. 1	○	○	○		○	
—	* Engine oil level check	Unit level/Engine warm	○	○	○		○	
49	Air filter	Wet type — clean/Replace as required No. 2			○	○	○	
48	Fuel petcock(s)	Clean/Flush tank as required	○		○		○	
Dealer	Ignition timing	Adjust/Clean or replace pts. as required		○	○	○		○
45	Carburetor adjustment	Check operation/Timings		○	○	○		○
Dealer	Carburetor overhaul	Clean/Repair as required/Refit/Adjust						4000
Dealer	Cylinder compression	Preventive maintenance check		○	○	○		○
Dealer	Decarbonize engine	Includes exhaust system			○			○

* indicates pre-operational check items.

Service Notes:

No. 1. DRIVE CHAIN: In addition to tension and alignment, chain must be lubricated every 200 ~ 250 miles. If unit is subjected to extremely hard usage and wet wheather riding, chain must be checked constantly. See "Lubrication Intervals" for additional details.

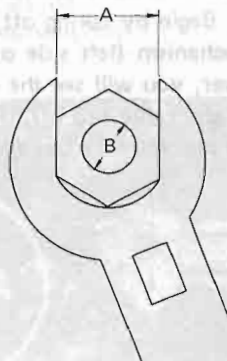
No.2. AIR FILTER: Remove and clean filter at least once per month or every 1,000 miles.

2. Torque specifications

The list below covers those stud/bolt sizes with standard I.S.O. pitch threads. Torque specifications for components with thread pitches other than standard are given within the applicable chapter.

Torque specifications call for dry, clean threads. Components such as the cylinder or cylinder head should be at room temperature prior to torquing. A cylinder head or any other item with several fasteners should be torqued down in a cross-hatch pattern in successive stages until torque specification is reached. The method is similar to installing an automobile wheel and will avoid warping the component.

A (NUT)	B (BOLT)	TORQUE SPECIFICATION		
		m-kgs.	ft.-lbs.	in.-lbs.
10 mm.	6 mm.	1.0	7.2	85
13 mm.	8 mm.	2.0	15	175
14 mm.	8 mm.	2.0	15	175
17 mm.	10 mm.	3.5 ~ 4.0	25 ~ 29	300 ~ 350
19 mm.	12 mm.	4.0 ~ 4.5	29 ~ 33	350 ~ 400
22 mm.	14 mm.	4.5 ~ 5.0	33 ~ 36	400 ~ 440
26 mm.	17 mm.	5.8 ~ 7.0	42 ~ 50	500 ~ 600
27 mm.	18 mm.	5.8 ~ 7.0	42 ~ 50	500 ~ 600
30 mm.	20 mm.	7.0 ~ 8.3	50 ~ 60	600 ~ 700
SPARK PLUG		2.7 ~ 2.9	19 ~ 21	230 ~ 250



3. Clutch cable

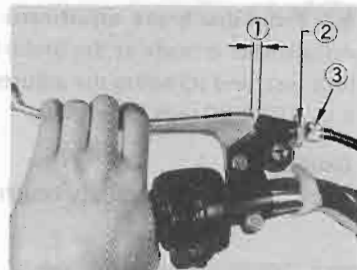
The clutch cable requires periodic lubrication to prevent the cable strands from rusting or hanging up in the casing. First, disconnect the cable from the clutch lever by screwing the adjuster all the way into the lever holder. This will provide enough free play, in the cable for you to slip the cable out of the lever holder through the slot in the lock nut, adjuster, and holder. Hold the cable upright and allow several drops of lubricant to flow down the cable. Hold the cable upright for several minutes to permit complete lubrication.

If the cable needs to be replaced, then perform the steps above and disconnect the cable at the lever. Next, disconnect the cable at the engine. Begin by taking off the cover that houses the clutch activating mechanism (left side of the engine). Looking at the inside of this cover, you will see the clutch actuating arm. Push the arm up and lift the cable end off. Removing the old cable and hooking up the new one will take but a few moments.

4. Clutch adjustment

The RD350B has two clutch adjustments. The first adjustment, located at the handlebar lever, is used to take up slack from cable stretch and to provide sufficient free play so that the clutch engages and disengages completely. The picture right illustrates all the parts involved in making the adjustment.

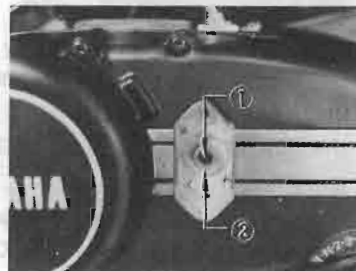
- a. First, loosen the lock nut. Then turn the adjuster either in or out depending on which direction is necessary to arrive at $1/16 \sim 1/8$ in. (2 ~ 3 mm.) free play.



1. $1/16 \sim 1/8$ in. (2 ~ 3 mm.)
2. Lock nut
3. Adjusting bolt

- b. The second adjustment is located behind the adjusting cover. Removing the cover will expose the adjusting set screw and lock nut.

Loosen the lock nut, rotate the set screw in until it lightly seats against a clutch push rod that works with the set screw to operate the clutch. Back the set screw out $1/4$ turn and tighten the lock nut. This adjustment must be checked because heat and clutch wear will affect this free play, possibly enough to cause incomplete clutch operation. Recheck clutch cable adjustment at handlebar after adjusting.



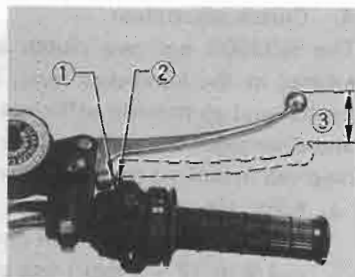
1. Adjusting screw
2. Lock nut

5. Front disc brake adjustment

Adjustment is made at the brake lever. This is done by loosening the lock nut, and screwing the adjuster in or out until you have 1/2 in. ~ 1 in. (13 ~ 26 mm.) free play.

Caution:

Lock nut must be securely retightened.



1. Lock nut
2. Adjusting screw
3. 1/2 ~ 1 in. (13 ~ 26 mm.)

6. Rear brake adjustment

The current free play of the rear brake pedal is about 1.0 in. (25 mm.). Adjust by turning the adjusting nut at the end of the rear brake rod a half turn at a time. After adjusting the brake, make sure the stop light is working. If not, readjust the stop light switch.

Note:

Inspect the brake linings for wear and clean the brake shoes and drums every 2,000 miles (3,000 kms.). Always keep the shoes and drums free of oil.

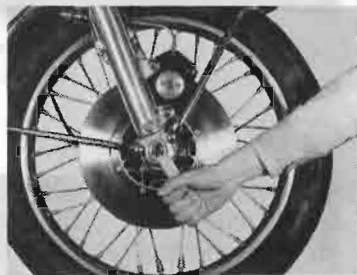
Rear brake adjustment should be performed any time the wheel is removed, or drive chain adjusted.



1. 1 in. (25 mm.)

7. Front wheel

Work that might need to be done on the front wheel assembly includes tire or tube exchange, hub/spokes/rim assembly replacement maintenance and inspection. The following are the steps necessary to dismantle the front wheel, step by step, and you should proceed with the steps until you have removed the part to be replaced. You as the owner, can replace everything but the hub, spokes or the rim. To individually replace spokes or rim requires that the spokes be "relaxed". This should be done by a competent dealer as the spokes must be positioned and torqued correctly. If not done properly wheel alignment will not be correct and steering will be negatively affected.



8. Front wheel removal

- a. Remove the cotter pin and remove the wheel nut.

- b. Loosen the front wheel axle holder nuts.

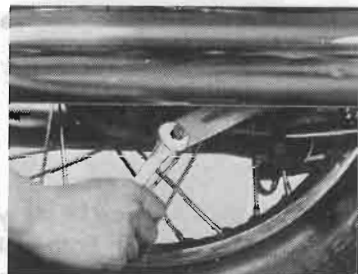


- c. Remove the front axle by simultaneously twisting and pulling out on the axle.
- d. Brace the front of the machine off the ground and remove the wheel assembly.
- e. During reassembly, make sure the axle nut is torqued, the holder nuts are torqued, and a new safety cotter pin is installed in that order.

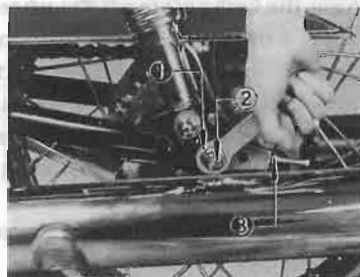


9. Rear wheel removal

- a. Remove the tension bar and the brake rod from the rear shoe plate. Note the presence and location of the lock washer and cotter pin. These are safety parts and must be included during reassembly.
- b. Loosen the chain tension adjusting nuts and bolts on both right and left sides.

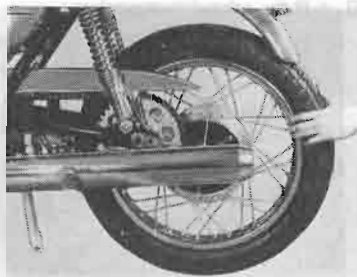


- c. Remove the cotter pin and rear wheel axle nut.
- d. Remove the rear axle.
- e. Remove the right hand chain adjuster.



1. Sprocket nut
2. Wheel axle nut
3. Lock nut

- f. Remove the distance collar and pull back the wheel assembly.



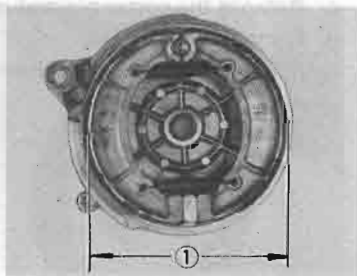
The brake plate can now be easily slipped out of the rear wheel hub. The brake plate carries both brake shoes. They can be left in place on the brake plate for measurement, as shown right-below, or they can be lifted off for replacement or maintenance. The two brake shoes are held in place by two springs. These springs hold the two shoes to the brake actuating cams. Removal of these springs, or spreading them, will allow the shoes to be lifted off. Whenever you have the brake plate off the wheel assembly, it is very good policy to apply a small amount of grease to the brake actuating cams.

Shown immediately below are two steps that must be performed periodically to maintain maximum stopping efficiency. The brake linings and brake drum must be in correct working condition, and these steps do much to guarantee perfect working order.

- g. Brake shoe

Measure the outside diameter of the brake shoe set with slide calipers.

If it measures less than 6.9 ins. (175 mm.), replace the shoes. Smooth out any rough shoes surface with sandpaper.



1. 6.9 ins. (175 mm.)

10. Brake drum, rims, spokes (front and rear wheels)

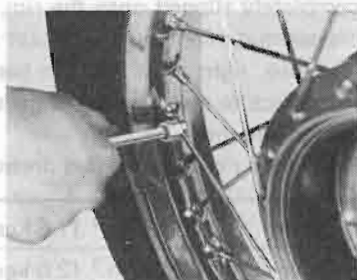
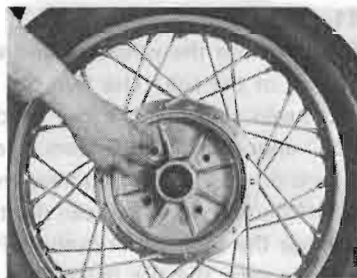
Oil or scratches on the inner surface of the brake drum will impair braking performance or result in abnormal noises. Remove oil by wiping with a rag soaked in lacquer thinner or solvent. Remove scratches by lightly and evenly rubbing with emery cloth.

There are also checks that you can perform to determine if wheel work is necessary for your dealer to do. First, check for any loose spokes. This can be checked by bracing the front end off the ground so that the front wheel can spin free. Slowly revolve the front wheel and at the same time let the metal shaft of a fairly heavy screwdriver bounce off each spoke. If all the spokes are tightened approximately the same, then the sound given off by the screwdriver hitting the spokes should sound the same. If one spoke makes a dull flat sound, then check it for looseness.

While you have the front end up in the air, you should check that the front wheel does not have too much run-out. "Run-out" is the amount the front wheel deviates from a straight line as it spins.

Secure the front forks from turning, spin the front wheel, and solidly anchor some sort of a pointer about 1/8" away from the side of the rim.

As the wheel spins, the distance between the pointer and the rim should not change more than 1/16" total. Any greater fluctuation means that you should have your dealer remove this rim warpage by properly adjusting the spokes.



Front	38 lb/in. ² (5.0 kg/cm ²)	High road riding or light with passenger
Rear	34 lb/in. ² (4.4 kg/cm ²)	High road riding or light with passenger

11. Tire repair

First, remove the valve cap and valve stem lock nut. Empty all the air out of the tire. Use two tire removal irons (with rounded edges) and begin to work the tire bead over the edge of the rim, starting 180° opposite the tube stem. Take care to avoid pinching the tube as you do this. After you have worked one side of the tire completely off the rim, then you can slip the tube out. Be very careful not to damage the stem while pushing it back out of the rim hole. If you are changing the tire itself, then finish the removal by working the tire off the same rim edge just previously mentioned.

Reinstalling the tire assembly can be accomplished by reversing the disassembly procedure. The only difference in procedure would be right after the tube has been installed, but before the tire has been completely slipped onto the rim, inflate the tube. This removes any creases that might exist. Release the air and continue with reassembly. Also, right after the tire has been completely slipped onto the rim, check to make sure that the stem is squarely in the center of the hole in the rim.

Inflate the tires to specified pressure.

Front	23 lbs/in. ² (1.6 kgs/cm. ²)	Normal riding
Rear	29 lbs/in. ² (2.0 kgs/cm. ²)	
Front	29 lbs/in. ² (2.0 kgs/cm. ²)	High speed riding or riding with passenger
Rear	34 lbs/in. ² (2.4 kgs/cm. ²)	

12. Drive chain

Because the chain consists of an extraordinary amount of parts that rub against one another, it is prone to wear if it is not maintained constantly and correctly. Without any lubrication, a chain can wear out within 100 miles. You should develop a habit of servicing the chain on a regular schedule. This habit is especially important if you spend the major portion of your time riding where dirt can readily work into the chain links.

- a. Lubrication — there are several excellent pressure can lubricants available. Use a brush and a rag to wipe off any accumulation of dirt, then spray a liberal amount of lubricant on the chain at least every 200 miles.
 - b. Cleaning — Completely saturate the chain with solvent to remove as much dirt as possible. Drain and dry the chain thoroughly. Immediately after the chain has dried completely, lubricate to prevent any rust from forming.
 - c. Adjustment — proper drive chain up and down free play, with the rider in position, should equal $3/4$ in. (20 mm.) when measured at the center of the lower section of chain.
- Follow these steps to obtain the correct free play:

Caution:

During machine cleaning, do not remove chain lubricant. See "Cleaning" section for additional details.

Drive chain adjustment:

- Remove the cotter pin and loosen the axle nut (2) and sprocket wheel nut (1).
- Loosen the chain adjusting bolt lock nuts (3).
- Rotate the adjusting bolts in or out, whichever is needed to obtain the correct free play, and at the same time make sure that both ends of the axle are positioned evenly. This can be checked by utilizing the marks on the very end of the swing arms, just above the rear axle.
- After completing the adjustment, retighten all the lock nuts.
- Finally, be sure to install a new cotterpin and check for correct brake pedal operation as it could have changed due to the chain adjustment.



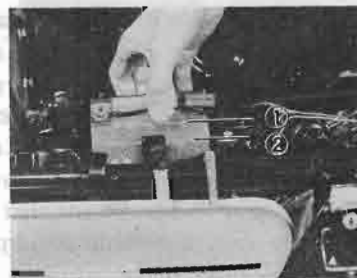
1. Sprocket wheel nut
2. Axle nut
3. Lock nut

Front	20 in. x 1.4 in. x 1.4 in.
Rear	20 in. x 1.4 in. x 1.4 in.
Front	20 in. x 1.4 in. x 1.4 in.
Rear	20 in. x 1.4 in. x 1.4 in.

13. Battery

The life of your battery depends greatly on how well you keep it serviced. In order to service it completely and correctly, there are certain facts that you must know.

- a. Always keep the battery fluid level between the "Maximum" and the "Minimum" level. It should be checked at least once a month, and more often during hot weather. If the battery needs filling, use distilled water. Do not use tap water as it usually contains minerals that can be harmful to the life of the battery.
- b. If for any reason the battery has become discharged, and you are going to charge it yourself, use a "trickle charger" that has no more than a one amp maximum. Also, make sure that all the battery caps have been taken off and that the rubber battery breather tube is not clogged or pinched shut. A charging battery creates gas, and pressure could build up in the battery if all the outlets were plugged up. Charge battery in a well ventilated area away from open flame.
- c. If the motorcycle is to be stored for more than a month, then remove the battery, have it fully charged, and store it in a cool, dry storage area. If storage time is going to be lengthy, it is best to leave the battery with your dealer with specific instructions to recharge the battery every month or so. This procedure is necessary to insure maximum battery life.

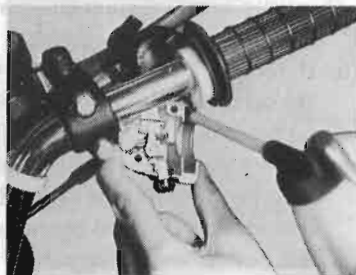


1. Maximum level
2. Minimum level

When reinstalling the battery, be sure to hook up the RED lead to the positive terminal and the BLACK lead to the negative terminal (the polarity of each is stamped just below each terminal).

14. Throttle cable and grip lubrication

The throttle twist grip assembly should be greased at the time that the cable is lubricated, since the grip must be removed to get at the end of the throttle cable. Two screws clamp the throttle housing to the handlebar. Once these two are removed, the end of the cable can be held high to pour in several drops of lubricant. With the throttle grip disassembled coat the metal surfaces of the grip assembly with a suitable all-purpose grease to cut down friction. (See lubrication chart)



15. Carburetor

There are only three adjustments on the carburetor that do not require the services of a mechanic: the idle mixture, engine idle speed, and the throttle cable slack. Because the carburetor is such a critical part of the engine, any carburetor disassembly should be done by an experienced mechanic.

a. Idle mixture

To set the idle mixture you must turn the pilot air screw (#1) in until it lightly seats, then back it out 1-1/4 turns — no more or no less. This can be set with the engine stopped.

b. Idle speed

Start the engine and let it warm up. Next, screw the throttle stop screw (#2) in or out, whichever direction is necessary for the engine to idle between 1,100 and 1,200 r.p.m. (check tachometer). Lefthand and righthand idle speed screws must be set so that both cylinders are working together.



1. #1

2. #2

c. Throttle cable slack

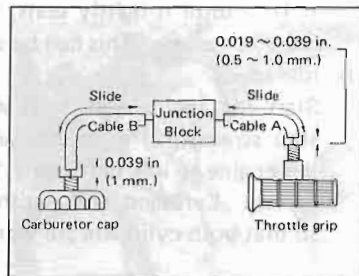
After engine idle speed has been set, then loosen the cable adjuster lock nut and turn the adjuster on top of the carburetor until there is 0.04 in. (1 mm.) of slack in throttle cable "B".

Retighten the lock nut. Adjust both carburetors.

Make the second throttle cable slack adjustment at the throttle grip. There is a lock nut and adjuster where cable "A" meets cable guide "A". Loosen the lock nut and turn the adjuster until there is 0.02 ~ 0.04 in. (0.5 ~ 1.0 mm.) slack in throttle cable "A". Retighten the lock nut.

Note:

To measure the amount of cable slack, slide the cable back and forth over the throttle wire, and see how much end gap exists between the cable end and top of the carburetor (or cable guide "A", if checking throttle cable "A" slack).



16. Throttle cable replacement

Replacement of this cable should be left to your dealer as it is complicated, and carburetor and Autolube adjustments are affected.

17. Autolube pump cable adjustment

Close the throttle grip completely, then twist it open until all cable slack is removed, but stop before the slides start to lift.

Adjust the pump cable so the mark on the pump pulley lines up with the "adjust pulley guide pin". The Autolube cable adjustor is located at the bottom end of the cable, screwed into the top of the right case cover.



Note:

If the pump runs out of oil, the pump must be bled to release air trapped in the pump. Remove the Phillips head bleed screw, twist the throttle to full open position (turns the Autolube pump to maximum stroke), and rotate the plastic manual starter pump plate until only oil comes out the bleed hole (air stops coming out with the oil). Reinstall and tighten the bleed screw.

18. Fuel petcock

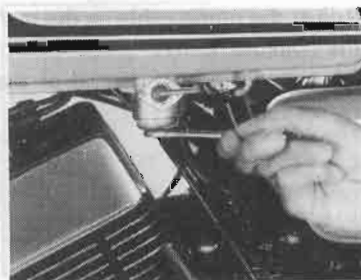
The petcock serves another purpose other than acting as a fuel on and off valve. A wire mesh filter is incorporated into the assembly.

This filter must be removed occasionally and cleaned. Screw off the threaded cup at the bottom of the petcock and remove the filter.

The filter might momentarily hang up in the petcock itself, if it does not drop down with the unscrewed cup.

Caution:

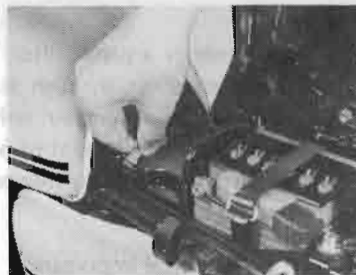
When reinstalling the cap, do not overtighten as the rubber sealing washer inside could buckle and jam up into the fuel passage of the petcock.



19. Air filter

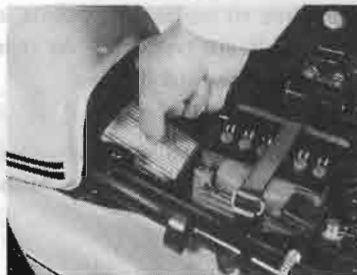
An air cleaner excludes dust and dirt from the engine. It must be clean at all times. If you drive often on dirt roads, be sure to clean it at least once a month.

- a. Open the seat and remove the rubber band holding the air cleaner case cap.



- b. Remove the case cap.

- c. Raise the cleaner element and remove it.



Cleaning

The air cleaner is a paper filter. Never wash the filter in gasoline. Blow compressed air through it from the inside. Never wash the filter in water or oil use air only. Coat both ends of the cleaner element with a small amount of oil so that the foam rubber parts can easily be installed in the cleaner case.

20. Ignition timing

Timing is of critical importance. If after both your service checkups have been completed, and if for any reason you wish to check the timing, have your dealer check it for you.

21. Ignition points

Unless you are sufficiently experienced, it would be advisable for a mechanic to replace the points, as ignition timing will change when the points are replaced. As it is, points (and condenser) normally last several thousand miles.

Note:

In addition to the above, changes in point gap through wear will also change timing, have your Authorized Yamaha dealer service the ignition for you.



22. Spark plug

The spark plug in your machine can tell you a great deal as to how the engine is operating when you know how to "read" the plug. If the engine is operating correctly, and if it is being ridden correctly, then the tip of the white insulator in the spark plug will be a light tan color (standard plug is NGK B-8HS). If, when you remove the spark plug, it is very dark brown or black, then a plug with a hotter heat range might be needed. This situation is quite common during the engine break-in period. If the insulator tip shows a very light tan color, or is actually white, or if the electrodes begin to melt, then a spark plug with a colder heat range is required. Again, if the spark plug insulator tip does not have a tan color, have your dealer install a spark plug with a different heat range to correct the situation. Do not attempt to experiment with different heat range spark plugs yourself, as it takes an experienced eye to gauge which spark plug to use, and to gauge if the spark plug is actually at fault. It is all right though for you to replace the standard plug. Engine conditions can cause any spark plug to slowly break down. If deposits begin to build up, or if the electrodes finally become too worn, or if for any reason you believe the spark plug do not be functioning correctly, replace it. Be sure, when replacing the plug, that you always clean the gasket surface, that you use a new gasket, and that the spark plug is torqued to 19 ~ 21 ft-lbs. Also wipe off any grime that might be present on the surface of the spark plug.

The plug can be taken out to be cleaned and gapped. As long as deposit build-up on the insulator is not extreme, you can use a glass bead type spark plug cleaner to quickly remove the deposits. Use a wire type feeler gauge to set the electrode gap at 0.020 ~ 0.024 in. (0.5 ~ 0.6 mm.)

23. Transmission oil

The only servicing for you to do is to check and fill the transmission lubricating oil. The transmission dip stick is located right above the kickstarter. To check the level, warm the engine up for several minutes, screw the dip stick completely out and then just rest the stick in the hole.

Note:

When checking transmission oil level with the dip stick, let the unscrewed dip stick just rest on the case threads. Also, be sure the machine is positioned straight up and on both wheels.

Recommended oil:

Yamalube 4-stroke or SAE 10W/30 Motor oil, Type "SE"

Amount 1,500 c.c. (1.6 qts.)



The dip stick has a Minimum and a Maximum mark, and the oil level should be between the two. If the level is lower, then add sufficient oil to raise it to the proper level.

During the break-in period, you should replace the gear oil 30 days after the date of purchase or thereafter 2,000 miles. The transmission should be drained and refilled approximately every 2,000 miles. On the bottom of the engine there is a drain plug. Remove it and drain all the transmission oil out.

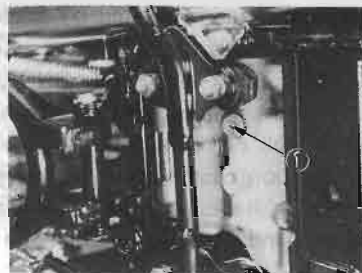
Reinstall the drain plug (make sure it is tight). Add oil through the dip stick hole.

Note:

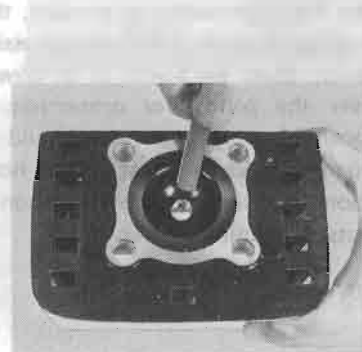
DO NOT ADD ANY CHEMICAL ADDITIVES. TRANSMISSION OIL ALSO LUBRICATES THE CLUTCH AND ADDITIVES COULD CAUSE THE CLUTCH TO SLIP.

24. Decarbonization

Carbon deposits in the combustion chamber, on the head of the piston, in the exhaust port, and in the muffler are a constant cause of engine power loss. Decarbonization of these parts is relatively simple, requiring only a few tools. A torque wrench is one of the necessary tools. Going any further though, such as removing the carbon from ring grooves, should be done by a Yamaha dealer, as this requires cylinder removal.



1. Drain plug



Begin this servicing step by gradually loosening the four cylinder retaining nuts, in a pattern. **DO NOT LOOSEN EACH NUT COMPLETELY ALL AT ONCE**, but work around the cylinder head, loosening each nut 1/2 turn at a time. Slip the head off and use a dull or round edge scraper to remove the carbon from the combustion chamber (do not remove the spark plug). The round end of a hacksaw blade works quite well. Use a rag dipped in solvent and thoroughly clean the area. Do not scratch the gasket surface.

Bring the piston up to the very top and use the same scraping tool to remove the carbon from the top of the piston. Blow off as much of the loosened carbon as possible, then use the solvent soaked rag to pick up as much of the rest as possible.

Next, rotate the piston as far down as possible. Slip a dry rag down over the piston for protection. Disconnect the muffler. Very carefully use a small scraper and remove the carbon from the port opening (take care that it does not fall back into the cylinder). As soon as possible, scrape the carbon from the exhaust port toward the outside opening.



The head can now be put back onto the cylinder. Carefully wipe off the gasket surfaces of both parts. Position the head gasket (which should be a new one) on the cylinder. Slip the head into place and tighten the four retaining bolts until they are finger tight. Use the torque wrench to tighten them further. Total torquing pressure is 15 ft-lbs. but you should torque all four nuts in a "cross" pattern, and in two progressive steps of increasing torque (example: 5 ft-lbs., 10 ft-lbs.) to prevent warpage.

Next, remove the inner cylinder from the back end of the muffler. This is done by removing the set screw and pulling out the assembly. Remove all the carbon deposits with a wire brush. While the assembly is out of the muffler, look inside for additional deposits. If any are present, the muffler should be removed and a stout scraper used to break it loose. Tip the muffler up and shake out all the loose carbon. Reinstall the muffler, slip the inner cylinder back, and tighten down the set screw. This decarbonization procedure, even though it only takes a short time to complete, is absolutely necessary to prolong the performance life of the engine. Whether you perform this maintenance yourself, or have your dealer do it, be sure to faithfully follow the maintenance time recommendations listed in the chart at the beginning of the SERVICING section.



25. Steering

Periodically you should check for any looseness in the steering assembly. Do this by blocking the front end off the ground, grasping the bottom of the forks, and gently rocking the fork assembly backward and forward. You will feel any looseness in the steering assembly bearings. If any exists, do not attempt to correct it yourself but let your dealer make the adjustment with the correct tools.

Also, these same front fork bearings must also be lubricated every 4,000 miles. This the dealer should also do.

26. Front fork

At least every 4,000 miles the front fork oil should be completely drained and refilled. Remove the Phillips head screws in the very bottom of the forks. Next, remove the fork cap found on top of each fork tube and most of the fork oil will drain out. Compress the forks several times to pump all the remaining oil out. Slowly pour in 4.9 oz. (145 c.c.) oil in each fork leg. (see Lubrication Recommendations section for type of oil).

At least every other time you should have your mechanic dismantle the fork assembly and thoroughly clean out each fork. Water and dirt eventually coat much of the inner fork surfaces and cannot be readily removed just by draining.



VIII. WARRANTY INFORMATION

Study your Owner's Warranty Guidebook thoroughly. It contains your Warranty Policy, an explanation of the policy, break-in procedures and the warranty-required service schedules. Becoming familiar with these items will be to your advantage in making the best use of Yamaha's warranty program.

The acceptance of any warranty claim that your dealer might submit in the future depends greatly on just what has been done to the motorcycle. **IF ANY PARTICULAR FAILURE CAN BE TRACED DIRECTLY TO A REPAIR OR MAINTENANCE PERFORMED INCORRECTLY, THE WARRANTY CLAIM MAY NOT BE ACCEPTED.** For this reason, we recommended that all services beyond those detailed in this manual be performed by a qualified mechanic at an authorized Yamaha dealer.

There are certain requirements that must be met to qualify for warranty coverage.

1. Your machine must be registered for warranty. This is accomplished when the Warranty Registration card is filled out by you and mailed by the dealer to Yamaha at the time of purchase.
2. Your Owner's Warranty Guidebook outlines the required service schedules and provides a maintenance record for your protection and convenience. Proper maintenance will insure a trouble free life for your new Yamaha.
3. If any problems occur, which you feel should be covered under warranty, **NOTIFY YOUR DEALER IMMEDIATELY.** Do not delay, as little problems left unrepaired can become large problems which may not be covered under warranty.

IX. REQUIREMENTS FOR A GOOD MOTORCYCLIST

1. Safety is more important than speed. Always observe traffic regulations & signs.
2. Always use quality gasoline and oil, and avoid the inconvenience of running out of gas or oil.
3. Check tire pressures before every ride.
4. Warm up the engine for about one minute before riding.
5. Shift gears gently, while momentarily closing the throttle, avoid power shifting.
6. During the break-in period, ride at the suggested speed in each gear.
7. Apply the front and the rear brake at the same time.
8. Down a long hill, use engine compression as a brake.
9. When parking, be sure to turn off and remove the ignition key, turn off the fuel petcock, and lock the steering.
10. Check parts at regular intervals as described in this manual.

X. TROUBLESHOOTING

1. Factory authorized service

Your Yamaha dealer is a factory trained mechanic who guarantees thorough and correct maintenance for your motorcycle. We recommend that you let your dealer make all repairs and adjustments on your motorcycle. You will be assured prompt and good service.

2. Genuine Yamaha Parts

Always use genuine Yamaha parts and not "substitute" brands. Yamaha parts are manufactured to meet the factory's exacting standards of precision and quality.

3. If something should go wrong

The RD350B undergoes rigid factory tests to assure you long and satisfactory performance. However, if something should go wrong with your machine, immediately ask your Yamaha dealer for advice. He is always glad to answer your questions.

Important:

Some components are sealed or cannot be disassembled. If repairs to such components are necessary go to your Yamaha dealer. Yamaha cannot be responsible for repairs and adjustments to such components performed by unauthorized personnel.

Note:

The inspection and maintenance of the Autolube system should be entrusted to your dealer.

XI. SPECIFICATIONS

Model	YAMAHA RD350B
Dimension:	
Overall length	80.3 ins. (2,040 mm.)
Overall width	32.9 ins. (835 mm.)
Overall height	43.7 ins. (1,110 mm.)
Wheelbase	52.0 ins. (1,320 mm.)
Minimum road clearance	6.1 ins. (155 mm.)
Weight:	
Net	315 lbs. (143 kgs.)
Performance:	
Maximum speed	100 mph plus (160 km/h. plus)
Fuel consumption (on paved level road)	82.5 mi/US gal. at 37 mph. (35 km/lit. at 60 km/h.)
Climbing capacity	28 degrees
Minimum turning radius	90.6 ins. (2,300 mm.)
400 m. acceleration	13.7 sec.
Braking distance	46 ft. at 31 mph. (14 m. at 50 km/h.)
Engine:	
Type	Air-cooled, 2-stroke, gasoline, Torque induction
Engine model	360

Model	YAMAHA RD350B
Cylinder	2 in parallel, forward inclined
Displacement	21.18 cu. in. (347 c.c.)
Bore & Stroke	2.510 ins. x 2.126 ins. (64 mm. x 54 mm.)
Compression ratio	6.6 : 1
Starting system	Primary kick
Ignition system	Battery
Gasoline tank capacity	3.2 US gals. (12 lits.)
Oil tank capacity	2.1 US qts. (2 lits.)
Lubricating system	Separate lubrication (Yamaha Autolube)
Battery capacity	12 V. 5.5 AH.
Battery type	12N5.5A-3B
Generator system	A.C. Generator
Generator type	AX2010N1
Generator manufacturer	Mitsubishi Electric Co., Ltd.
Spark plug	NGK (B-8HS) x 2
Carburetor	VM28SC
Air cleaner	Dry, paper filter
Transmission:	
Primary reduction system	Gear
Primary reduction ratio	66/23 2.869

Model	YAMAHA RD350B
Secondary reduction system	Chain
Secondary reduction ratio	40/15 2.666
Clutch	Wet, multi-disc
Gear box type	Constant mesh, 6-speed
Operating system	Left foot operated, Return system
Gear ratio First	36/14 2.571
Second	32/18 1.777
Third	29/22 1.318
Fourth	26/25 1.040
Fifth	24/27 0.888
Sixth	22/28 0.785
Steering:	
Caster	62°30'
Trail	4.17 ins. (106 mm.)
Tire size:	
Front	3.00-S18-4PR
Rear	3.50-S18-4PR
Suspension system:	
Front	Telescopic fork, coil spring, oil damped

Model	YAMAHA RD350B
Rear	Swing arm, coil spring, oil damped
Frame:	Double cradle-type, high tensile tube frame
Lamps:	
Headlamp	12 V. 35W/25 W.
Taillamp	12 V. 8 W.
Stoplamp	12 V. 27 W.
Flasherlamps	12 W. 27 W.
Pilot lamps N	12 V. 3 W.
F	12 V. 3 W. x 2
H	12 V. 3 W.
Meterlamps	12 V. 3 W. x 4
Meter system	Separate type, tachometer & speedometer
Stoplamp warning indicator	12 V. 3 W.

XII. CONSUMER INFORMATION

STOPPING DISTANCE

This figure indicates braking performance that can be met or exceeded by the vehicles to which it applies, without locking the wheels, under different conditions of loading and with partial failures of the braking system. The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions and the information may not be correct under other conditions.

Description of vehicles to which this table applies: Yamaha motorcycle RD350B

A. Fully Operational Service Brake

Load

Light

157

Maximum

180

0 100 200 300

Stopping Distance in Feet from 60 mph.

ACCELERATION AND PASSING ABILITY

This figure indicates passing times and distances that can be met or exceeded by the vehicles to which it applies, in the situations diagrammed below.

The low-speed pass assumes an initial speed of 20 mph. and a limiting speed of 35 mph. The high-speed pass assumes an initial speed of 50 mph. and a limiting speed of 80 mph.

NOTICE: The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

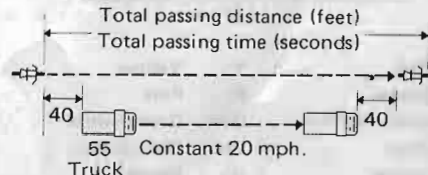
Description of vehicles to which this table applies: Yamaha motorcycle RD350B

Summary table:

Low-speed pass	<u>350</u> feet: <u>7.1</u> seconds
High-speed pass	<u>970</u> feet: <u>9.7</u> seconds

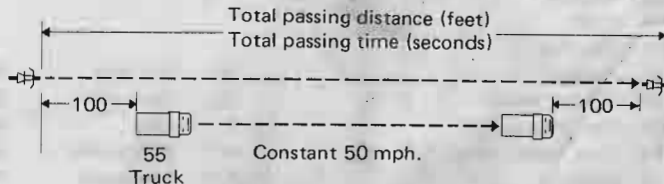
LOW-SPEED

Initial speed 20 mph. Limiting speed 35 mph.



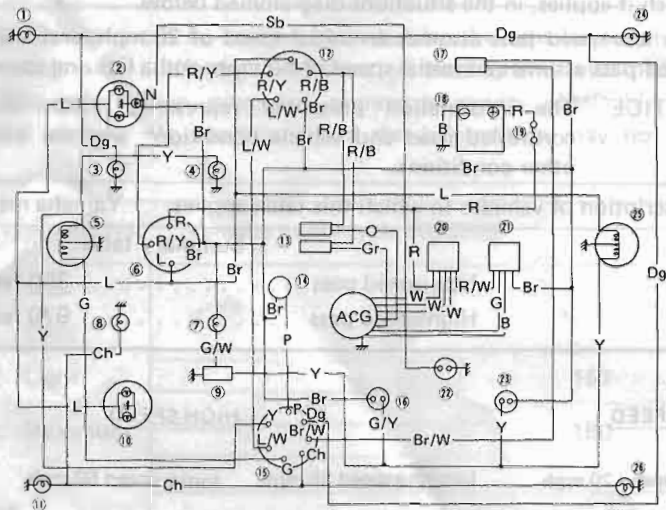
HIGH-SPEED

Initial speed 50 mph. Limiting speed 80 mph.



XIII. WIRING DIAGRAM

1. Front flasher lamp (R)
2. Tachometer
3. Flasher indicator
4. High beam indicator
5. Head lamp
6. Main switch
7. Stop lamp indicator
8. Flasher indicator
9. Lamp checker
10. Speedometer
11. Front flasher lamp (L)
12. Handle switch (R)
13. Ignition coil
14. Horn
15. Handle switch (L)
16. Front stop switch
17. Flasher relay
18. Battery
19. Fuse
20. Rectifier
21. Regulator
22. Neutral switch
23. Rear stop switch
24. Rear flasher lamp (R)
25. Taillight
26. Rear flasher lamp (L)



Sb: Sky blue
Dg: Dark green
L: Blue
R/Y: Red/yellow
R/B: Red/black
L/W: Blue/white

R: Red
Br: Brown
G/Y: Green/yellow
Gr: Grey
O: Amber

Y: Yellow
P: Pink
Ch: Dark brown
W: White



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